



ENERGY SAVING JTL Suction Pressure Optimisation Application SPO23



Benefits of installing suction pressure optimisation.

This document shows data taken from a site after installation of suction pressure optimisation for an LT compressor pack. For the purpose of monitoring the savings the optimiser was switched on and off daily for a two week period.

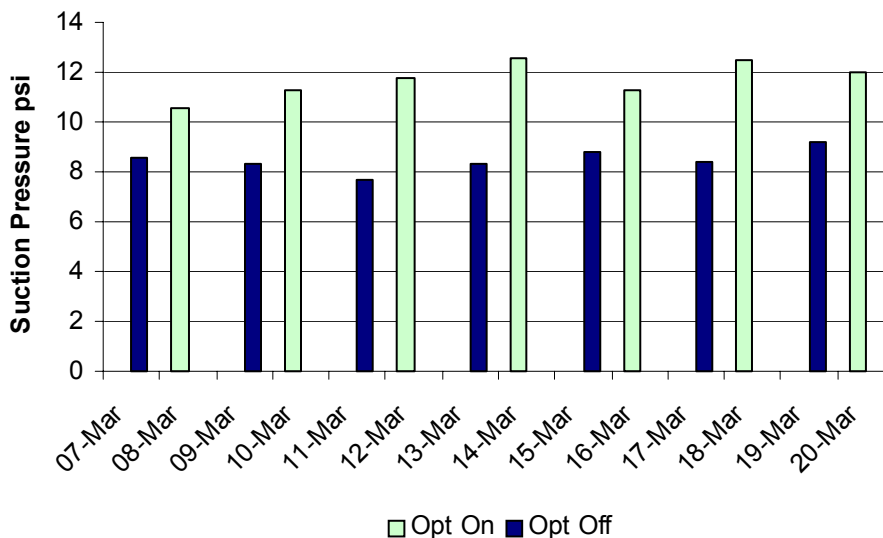
More details about the way in which JTL Suction Pressure Optimisers work are given on the sales support datasheet Doc No. 03081 - JTL Suction Pressure Optimisation Principles.

Mean Daily Suction Pressure

The following graph shows the mean daily suction pressure with the optimiser turned on and, for comparison, with the optimiser turned off.

The higher mean pressure results from a reduction in compressor run-time; this reduces energy consumption and the running cost of plant.

The higher evaporating temperatures reduce the ice burden on the evaporator coil, reducing the energy required to defrost the coil, and can improve the quality of the product displayed.

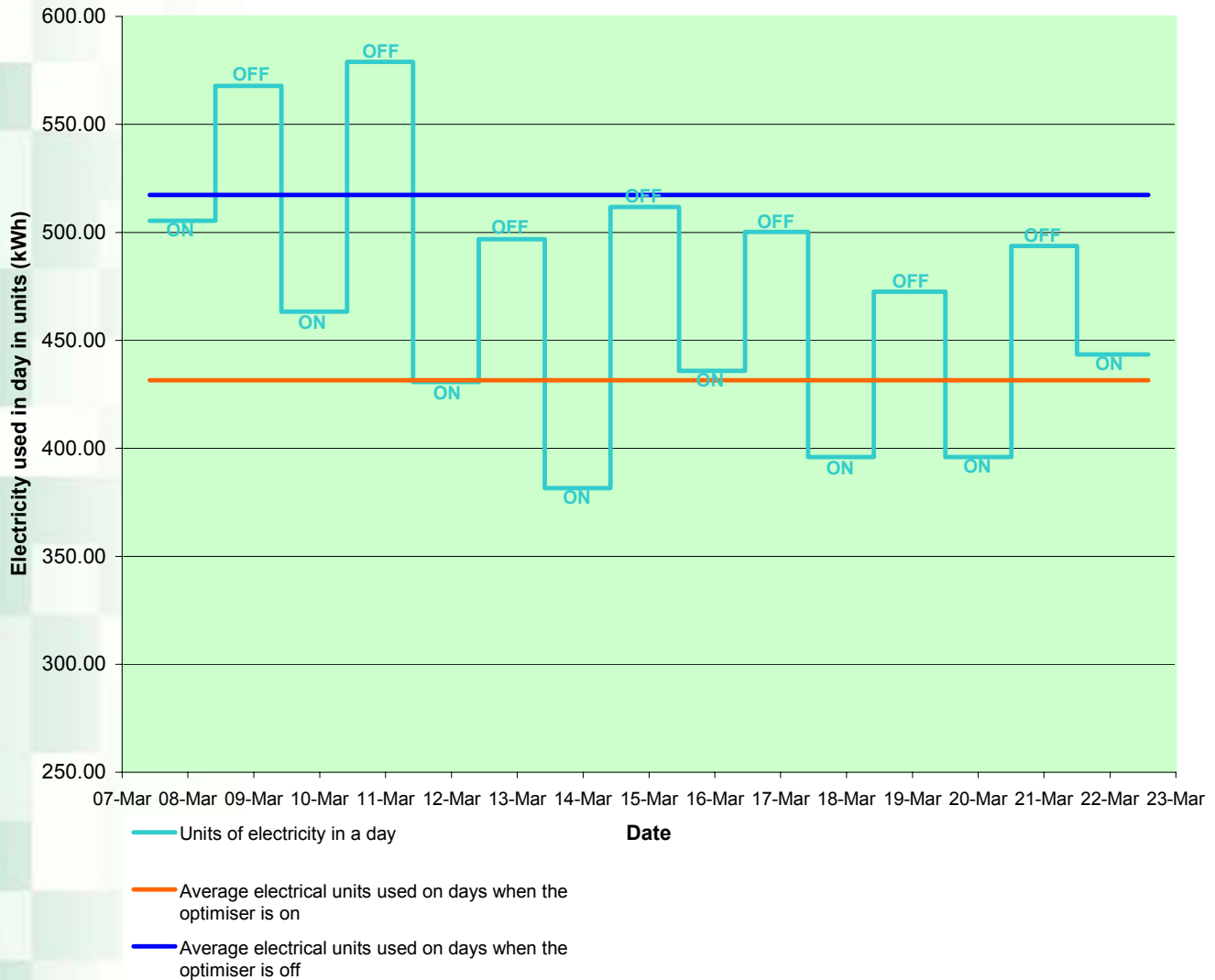


- Mean Suction Pressure with Optimiser on = 11.73 psi
- Mean Suction Pressure with Optimiser off = 8.47 psi
- **Mean Suction Pressure Lift = 3.26 psi**
Refrigerant Type R404A



Energy Monitoring Data

The following graph shows the energy consumption when the optimiser is on and off over 24 hour periods.



- Daily units (kWh) with Optimisation on = 431.53
- Daily units (kWh) with Optimisation off = 517.36
- **Actual Savings = 16.6%**
At 5.5 pence per unit (kWh) in this case £1723 pa

JTL Systems Limited

Head Office
Technical Support Centre
Monitoring Centre

Newbury
Newbury
Sunderland

tel: 44 (0)1635 263646
tel: 44 (0)870 321 8585
tel: 44 (0)870 321 4161